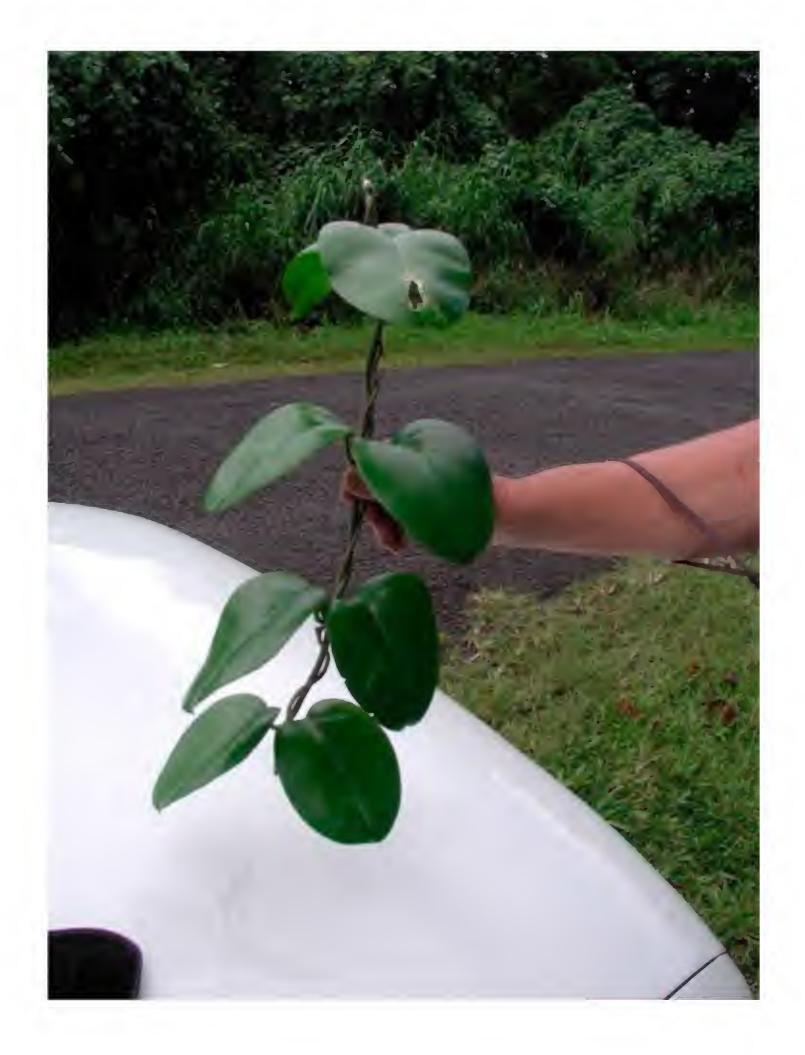
## HOYA NEW



Oh There it is!

# Western Samoa, Hoya with large leaves! A pdf publication devoted to the Genus Hoya ISSN 2329-7336

Volume 3 Issue 1

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### Editor: Dale Kloppenburg

#### **Contents**

When a species is collected from the wild, I feel it is wise to identify it, propagate it and name it. In this way it will eventually get it into commercial channels, be distributed to all those interested in this genus and thus be preserved. If in the future the species is lost through natural causes or forest destruction it will still be here on earth in your collection.

The following new species are presented in PDF format with ISSN number.

- 1. Eriostemma lauterbachii Kloppenburg
- 2. Eriostemma zollingerianum Kloppenburg
- 3. Reinstatement of Hoya mindorensis subsp. superba Kloppenburg
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**NOTE:** please see the Website publication of these species at "www.rare-hoyas.com". Go to end and click on "publication" to access new species publications.

#### Eriostemma lauterbachii Kloppenburg

ISSN 2329-7336

#### **Type description:**

In Monatsschritt für Kakeenkunde 1 (1896) 7-8. K. Schumann. **Hoya Lauterbachii** K. Sch. eine neue Wachsblume. Von K. Schumann. (Mit einer Abbildung)

Allen Erwachsenen ist von ihrer Kindheit her wohl noch in lebhafter Erinnerung. Dasz eine Wachsblume (Hoya carnosa R. Br.) zu den unentbehrlichen Zimmerblumen gehörte und mit dem Rosenkraut (Pelargonium roseum Ait.). einer Fetthenne (Sedum Sieboldii Sweet), dem Oleander (Nerium Oeander L.) und der Fuchsia den eisernen Bestand dieser Pfieglinge ausmachte. Manche dieser Pflanzen ist dem Wusche nach Abwechselungen, den Launen der Mode zum Opfer gefallen und wird nur noch recht selten angetroffen; andere haben im Wechsel der Zeiten Bestand gezeigt. Zu den ersteren gehört auch die Wachsblume, Welche nur noch hier und da einmal gesehen wird. Und doch verdiente sie wegen ihrer leichten Vermehrung durch Stecklinge, ihres willigen Wachstums und ihres reichlichen Blühvermögens eine erhöhte und erneute Beachtung. Zudem rechnet sie in die Familie der Asclepiadaceen, welche wir erst vor kurzem in einem eigenartigen Vertreter der Heurnia macrocarpa Schweinfurth kennen gelernt und besprochen haben, und welche wegen ihrer merkwürdigen Blütenbildung ein so lebhaftes Interesse erwecken. Die Gattung Hoya hat aber noch eine grosze Auzahl zum Teil prachtvoller Zierpflanzen des Warmhauses geliefert, so gehört H. imperialis Lindl, zweifellos eine der auffallendsten Pflanzen mit grossen hängenden Dolden dunkelbruner, groszer Blüten hierher. Keine der bisher beschriebenen, wohl nahe an hundert heraureichenden Arten kann sich mit einer neuen Art en Schönheit der Blüten messen, welche Herr Dr Lauterbach vor vier Jahren aus Neu-Guinea mitgebracht hat, und die er mir zur Beschreibung anvertraut hat. Der erwähnte Reisende, welcher auf seinem Gute zu Stabelwitz bei Breslau eifligst der Pflanzenkunde und Pflege obliegt, ist auch ein groszer Freund und Kenner der Kakteen.

Hoya Lauterbachii K. Sch. ist eine Liane, welche im Gegensatz zu den meisten Arten der Gattung behaart ist, Die ziemlich dünnen, einzelligen, geschlängelten Haare bilden an deu jüngeren, stielrunden Asten, sowie besonders auf der Rückseite der Blätter eine welche Bekleidung. Die letzteren sind 2—3cm lang gestielt; ihre Gestalt ist oblong, elliptisch oder bisweilen umgekehrt eiförmig elliptisch, sie sind kurz und spitz zugespitzt, am Grunde gerundet und von fleischiger Beschaffenheit. Die hängenden, doldenförmigen Blütenstande sind wenig-meist vierblütig; sie werden von einem bis 10 cm langen Stiele gestützt und auch die Blüten sind ziemlich lang (bis 8 cm) gestielt. Die etwas dünneren Blütenstiele sind ebenfalls wie die Blütenstandstiele meist behaart. Der Kelch miszt etwa 1 cm in der Länge, die Kelcblätter sind dreiseitigeiförmig bis oblong und spitz. Die Blumenkrone ist schüsselförmig, hat bis 7.5 cm im Durchmesser; sie ist beiderseitig dicht sammetig behaart; dabei kontrastiert die innere, dunkelbraunrote mit der äuszeren, smaragdgünen Farbe auf das lebhafteste, so dasz wir hier zweifellos eine der schönsten Blütenswikungen vor uns haben.

Der Befruchtungsapparat, des Gynosteg, nimmt den Boden der Blume ein; es hat 15 mm im Durchmesser. Die Coronaschuppen sind fleischig, auf der Stirnseite etwas vertieft und schnabelförmig über den Narbenkopf gezogen. Die Staubgefäsze haben ein ziemlich auffallendes, häutiges, schneeweiszes Anhängsel.

Herr Dr. Lauterbach fand die Pflanze am 10. November 1890 am Gogol-Flusse.

Bisher ist eine Art, welche sich durch derartige Dimensionen der Blüten kennzeichnet, weder in Neu-Guinea, noch sonst an einem Orte des östlichen Asiens gefunden worden. Wir wollen hoffen, dasz die Pflanze von der demnächst nach Kaiser-Wilhelmsland abgehenden Expedition, welche von Herrn Dr. Lauterbach geleitet werden wird, von neuem aufgefunden und nach Deutschland eingeführt wird. Type: Lauterbach number 930 blooming on the 10<sup>th</sup> of November 1890.

<u>Translation</u>: All adults probably still remember, vividly from their childhood, that a Wax Plant belonged to indispensable indoor plants and together with the Geranium (*Pelargonium roseum*, Ait.), a Sedum (*Sedum sieboldii*, Sweet), the Oleander (*Nerium oleander*, *L.*) and the Fuchsia they formed the continued existence of these "foster children". The desire for a change or the fashion trends let some of these plants disappear and it is difficult to find them now days - others provided consistency over time. The Wax Plant belongs to the first mentioned group and it can be seen only occasionally today. But it still received a higher and renewed attention because of its easy propagation with cuttings, its willingness to grow and its ample flowering. Furthermore, it belongs to the family of the Asclepiadaceae which we most recently got to know and discussed the peculiar representative *Heurnia macrocarpa* Schw., which is rather interesting because of its strange flower production. The genus Hoya has furnished a lot of hothouse plants some of which are splendid. One of them is *H. imperialis*, Lindl., unquestionably one of the most striking plants, with large hanging umbels of dark brown, big flowers.

None of the almost 100, so far described species, are a match for this new species considering the beauty of the flowers. Dr. Lauterbach brought it back from New Guinea four years ago and entrusted the description to me. The mentioned traveler, who applies himself to a great extent to plants and their care at his estate 'Zu Stabelwitz', near Breslau, is also a great lover and expert of cactus.

Hoya Lauterbachii K. Schumann is a vine, which is antithesis to the main species of the Genus. The fairly thin, unicellular, tortuous hairs form a soft covering over the younger terete branches, as also especially on the undersides of the leaves. The latter are 2-3 cm long stalked; their shape is oblong, elliptic or occasionally inverse ovate-elliptic, they are short and sharply acuminate, rounded at the base and of a fleshy nature. The pendant, umbelliform inflorescences are more or less four-flowered; they are supported by a peduncle up to 10 cm long and the flowers are also fairly long-stalked (up to 8 cm). The somewhat thinner pedicels are, like the peduncles, usually hairy, the calyx measures approximately 1 cm in length, the sepals are triangular-ovoid to oblong and acute. The corolla is bowl-shaped up to 7.5 cm in diameter; it is densely velvety-hairy on both sides; hence the inner dark red brown contrasts with the-outer emerald green color of the most vivid, so that we have here certainly one of the most beautiful of floral effects.

The fertilization apparatus, the gynostegium, occupies the base of the flower; it is 15 mm in diameter. The corona scales are fleshy, somewhat depressed at the front and extended beak-like over the stigma-head. The stamens have a fairly striking, snow-white, membranous appendage.

Dr. Lauterbach found the plant on the 10th November 1890 on the River Gogol.

Until now no species has been found, characterized by such dimensions of the flowers, neither in New Guinea, nor besides at a single place in eastern Asia. We would

like to hope that the plant is again discovered and introduced to Germany by the next expedition to go off to Northeastern New Guinea, which will be lead by Dr. Lauterbach.

#### Eriostemma zollingerianum Kloppenburg

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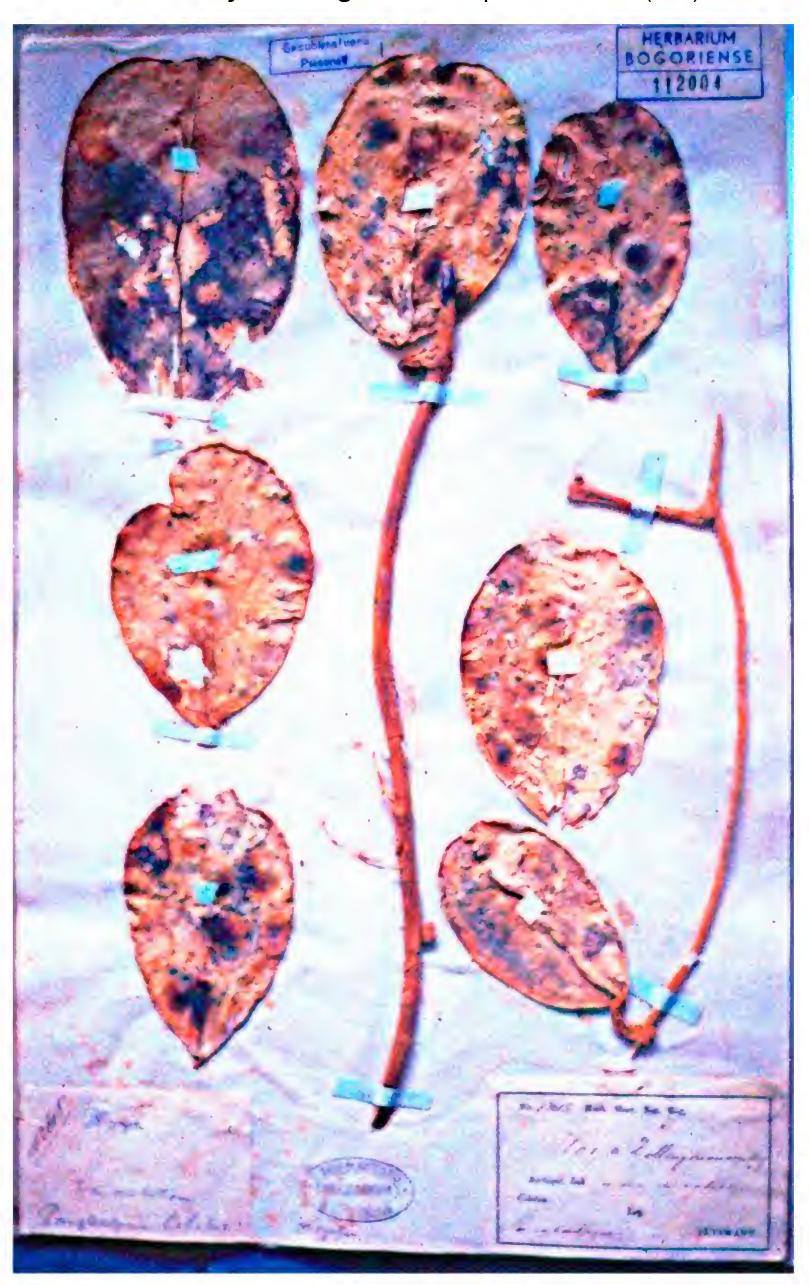
#### **Type description:**

In Flora Indiae Bataviae 2 (1857) 518. F. A. W. Miquel. 7. Hoya zollingeriana, Miq. Folia breviter petiolata, c basi obtuse supra petiolum antice subprotracta elliptica vel majora obovato-oblonga, obtusa vel brevissime obtuso-apiculata, crasse coriacea, subtus utrinque 5—4 veins obsoletis (in sicco subprominule) dichotomis notata, 4—2½ polls longa, pedicelli tenues, flores diametro 2½ lin., sepala ovate margine subscarioso ciliolata, corollae (vitellinae?) intus spongioso-pubescentis laciniae ovatae acutae reflexae, coronae stamineae phylla (violascentia?) in superficie ellipsoidea, extrorsum obtusa. Hoya coriacea Zoll. herb. excl. Syn. Bl.—Calyce H. fraternae affinis, corolla, H. coriaceae. pedunculus 4½ poll. longus, receptaculum conicum 2 lin. Longum, bracteis ciliatis. H. diversifoliae etiam accedit, floribus (colore propabiliter diversis) similis sed corollae laciniae non adeo acutae et coronae phylla longiora;—pedunculus etiam multo longior! Java, bij Lalaei, Mei (ZOLL.).

<u>Translation</u>: Leaves with short petioles and bases obtuse, on the upper dorsal side of the petiole somewhat drawn out, elliptic or largely obovate-oblong, or obtuse-apiculate, thick leathery, beneath on both sides 4-5 obsolete veins (when dry, somewhat prominent) in pairs, 4-2.5 inches long, pedicels slender, flowers 2.5 lines in diameter. Sepals ovate, margins somewhat roofed, ciliate. Corolla (yellowish?) inside papillose-pubescent, lobes ovate acute reflexed, leaflets of the staminal corona (violet?), upper surface ellipsoidal, outer obtuse. *H. coriacea*, Zoll., excluding syn. Bl.— Calyx near *H. fraterna*, corolla of *H. coriacea*. Peduncles 4.5 inches long, rachis cone shaped 1/6 inch long, bracts ciliate. H. *diversifolia* also resembles it, flowers (colour probably diverse) similar, but flaps of the corolla not nearly as acute and leaflets of the corona longer; — peduncles also much longer! Java near Lalaei, Mei (Zollinger).

Since no holotype species has previously been designated for this species: I hereby designate #12615 (BO) as the holotype.

Hoya zollingeriana Miquel # 12615 (BO)



Reinstatement of **Hoya mindorensis subsp. superba** Kloppenburg as a valid subspecies if the *Hoya mindorensis S*chlechter 1906, and can not be a synonym of *Hoya mindorensis* as published by Michael Rodda et al in Webbia; Journal of Plant Taxonomy and Geography Vol. 69, No. 1, 39-47. This subspecies differs from the species as published in Fraterna 18 (3):1 2005. Within the Hoya mindorensis species complex there are a large number of subspecies that differ as follows:

- 1. Coronal lobes meeting in the center / not meeting in the center.
- 2. Coronal lobes horizontal / sloping down outward.
- 3. Area surrounding coronal column hirsute / granulate.
- 4. Coronal lobes with tufts of hirsute cells / otherwise.
- 5. Corolla flattened range: 0.90 1.60 cm
- 6. Corona length apex apex: 0.30 0.44 cm
- 7. Retinaculum extensions (legs) turned under / strict (normal)
- 8. Altitude where collected: 200-450 m asl

Normally when a specimen differs in only a single character (not including flower color) it is designated as a var. (variety). Recently however an Australian species was published as a subsp. (subspecies) with only one difference noted (pubescence) however there may have been other differences not noted. If it differs by two or three characters it is designated as a subspecies unless the differences are profound in which case a new species designation would be preferred. **Hoya mindorensis subsp. superba** Kloppenburg differs from *Hoya mindorensis* Schlechter in Table above 1b, 2b, and sepals not ovate, and 5. corolla 1,10 cm and a shorter pollinia 0.50 mm vs. 0.68 mm. In addition the translators are more that 3 times shorter than the pollinia as opposed to Schlechter's drawing of 3x and the pollinia here have round inner ends not tapered and the pollinia are not "lateraliter compressa".

It is always best to compare specimens grown under the same environmental situation when possible like a nursery where the plants are allowed new growth under the same conditions. Under different environments plants may express different phenotypic characters if the genotype allows it. In Hoyas the foliage will exhibit the most variability in shape and size and the most stable is the pollinarium which will exhibit mostly no differences over time or environment so it is the most reliable character for classification.

Hoya mindorensis subsp. superba Kloppenburg is also not synonymous with *Hoya elmeri* Merrill it is not even close. It differs in having more elliptic foliage with acuminate apices not "subellipticis, 11 ad 15 cm longis, 5 ad 6.5 cm latis" also with a short acute apex anastomosing of the nerves not evident in the foliage of subsp. superb. In addition the pedicels here are 2.5 cm vs. 1.5 cm long. The sepals here are ciliate not so in elmeri also 0.20 cm long vs. 0.13 cm, the coronal lobes are longer here also much larger in diameter 1.60 cm vs. 0.65 cm; the coronal lobes are shorter then the corolla distance to the sinuses so they do not surpass the corolla sinuses. All these discrepancies would for sure constitute a separate species.

Below is the literature and type sheets of H. elmeri Merrill:

#### Hoya elmeri Merrill 1929

#### **Type description:**

In University of California Publications in Botany 15 (1929) 258. E. D. Merrill. Hoya elmeri Sp. nov. § Eu-hoya. Scandens, floribus exceptis glabra, caulibus teretibus; 5 ad 6 mm diametro, ramis paucis, levibus, circiter 3mm diametro, saepe radicantibus, internodiis usque ad 12 cm longis: foliis oppositis, carnosis in siccitate coriaceis. penninerviis, subellipticis, 11 ad 15 cm longis, 5 ad 6.5 cm latis, in siccitate pallidis, utrinque concoloribus, vix verruculosis, utrinque subaequaliter angustatis, basi acutis, apice acutis ad breviter obscureque acuminatis, nervis primariis utrinque circiter 7, tenuibus, distantibus. distinctis vel interdum subindistinctis, arcuato-anastomosantibus, reticulis laxis; petiolo crasso, circiter 1 cm longo; umbellis pendulis, pedunculo saltem 3.5 cm longo, circiter 1.5 mm crasso, glabro, pedicellis circiter 1.5 cm longis; floribus rubidis, 10 ad 12 mm diametro, rotatis, sepalis late ovatis, rotundatis, tenuibus, glabris, circiter 1.3 mm longis; corolla extus glabra intus villosa, lobis patulis vel recurvatis, latissimis, circiter 3mm longis et 5 mm latis, nee profunde 3-lobatis, lobis lateralibus late rotundatis, aliis acutis; corona circiter 6.5 mm diametro, processibus corneis, patulis vel leviter adscendentibus, acutis vel subacutis, compressis, circiter 3.5 mm longis, margine superiore subcarinato, haud plano. Elmer 20652, near Tawao. Scandent in dense thickets among large boulders in densely forested ravines, the flowers very dark red, easily falling.

I have not been able to refer this to any of the described species of this rather difficult genus. It is characterized by its rather small, dark red flowers, and its distinctly pinnately nerved, subelliptic leaves which are subequally narrowed to both the acute base and apex.

Translation: Climbing, glabrous except for the flowers, stalk round, 5 to 6 mm. in diameter, branches few, smooth, about 3 mm in diameter, often rooting, internodes up to 12 cm. long; leaves opposite, fleshy, when dry leathery, penninerved, somewhat elliptic, 11 to 15 cm long, 5 to 6.5 cm wide, when dry pale, both sides the same color, sparsely covered with small wort-like growths, both ends equally narrow, base acute, apex acute to briefly and obscurely acuminate, primary nerves on both sides of the costa 7, slender, distinct or sometimes somewhat indistinct, curved anastomosing, loosely reticulated; petiole thick, about 1 cm long; umbels pendulous, peduncle at least 3.5 cm long, nearly 1.5 cm. wide, glabrous, pedicels about 1.5 cm long; flowers red, 10-12 mm. in diameter, rotate, sepals broadly ovate, round, slender, glabrous about 1.3 mm long, corolla outside glabrous, inside silky, lobes spreading or recurved, very broad, about 3 mm. long and 5 mm. wide, not deeply 3 lobed, sides of lobes broadly rounded, others acute; corona about 6.5 mm in diameter, processes horny, spreading or slightly ascending, acute or somewhat acute, compressed, about 3.5 mm long, margins above somewhat keeled, not all flat.

#### Other literature:

In Sunyatsenia 3. 2/3 (1934) 175. Tsiang. **Hoya Elmeri** Merrill in Univ. Calif. Publ. Bot. 15: 258. (Pl. Elmer. Born.) 1929. Borneo: Near Tawao, A. D. E. Elmer 20652, Oct., 1922 - March, 1923. Endemic. Of this, we have a sterile twig and there detached flowers, which enable me to place it here. The most interesting thing in this species is that the coronal-lobes are very long, surpassing the sinus of the corolla-lobes. Otherwise, it closely resembles *H. carnosa*.

Hoya elmeri Merrill 1929 Holotype 20652 (UC) 2 m Hoya

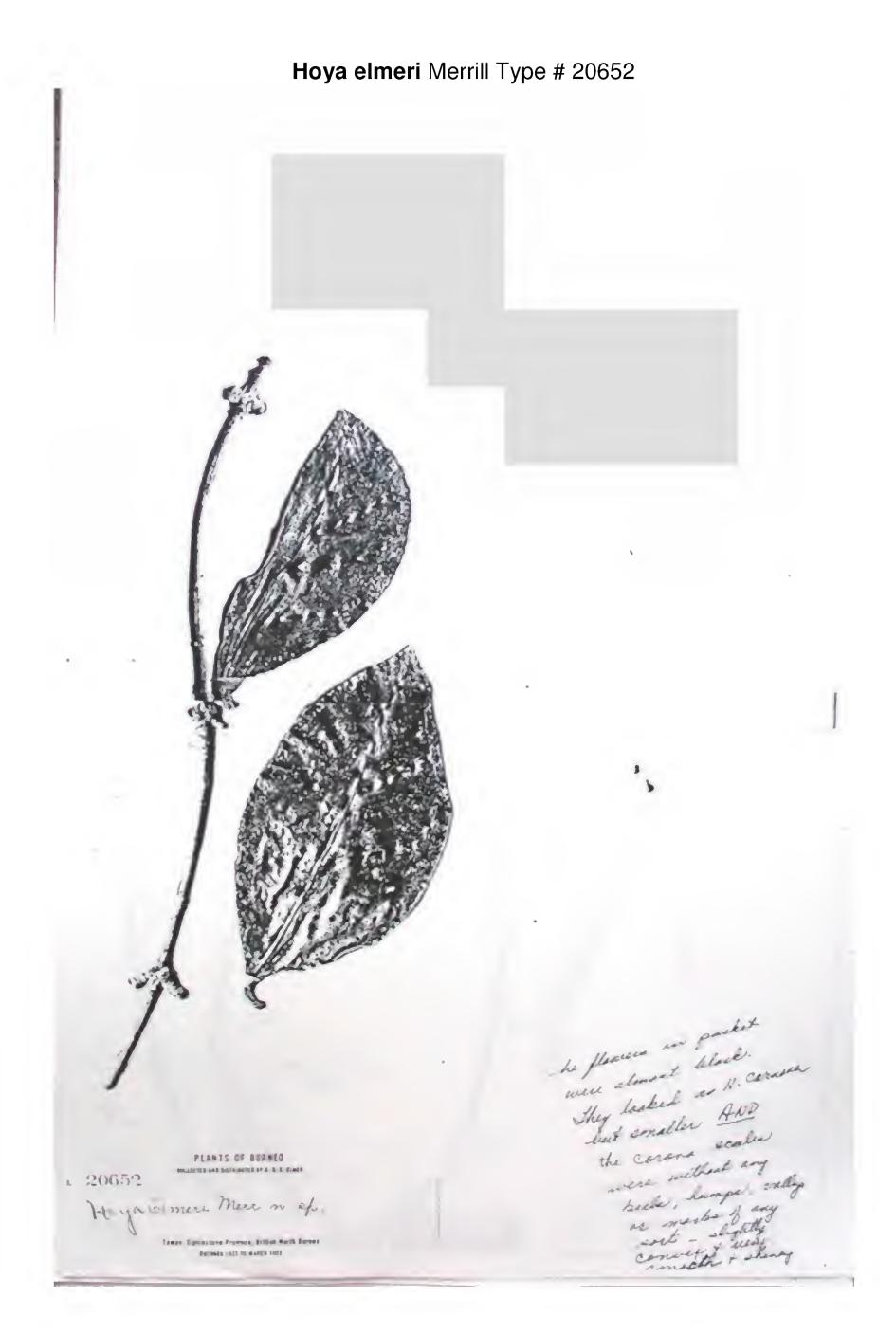


Hoya elmeri Merrill Type # 20652 (NY)

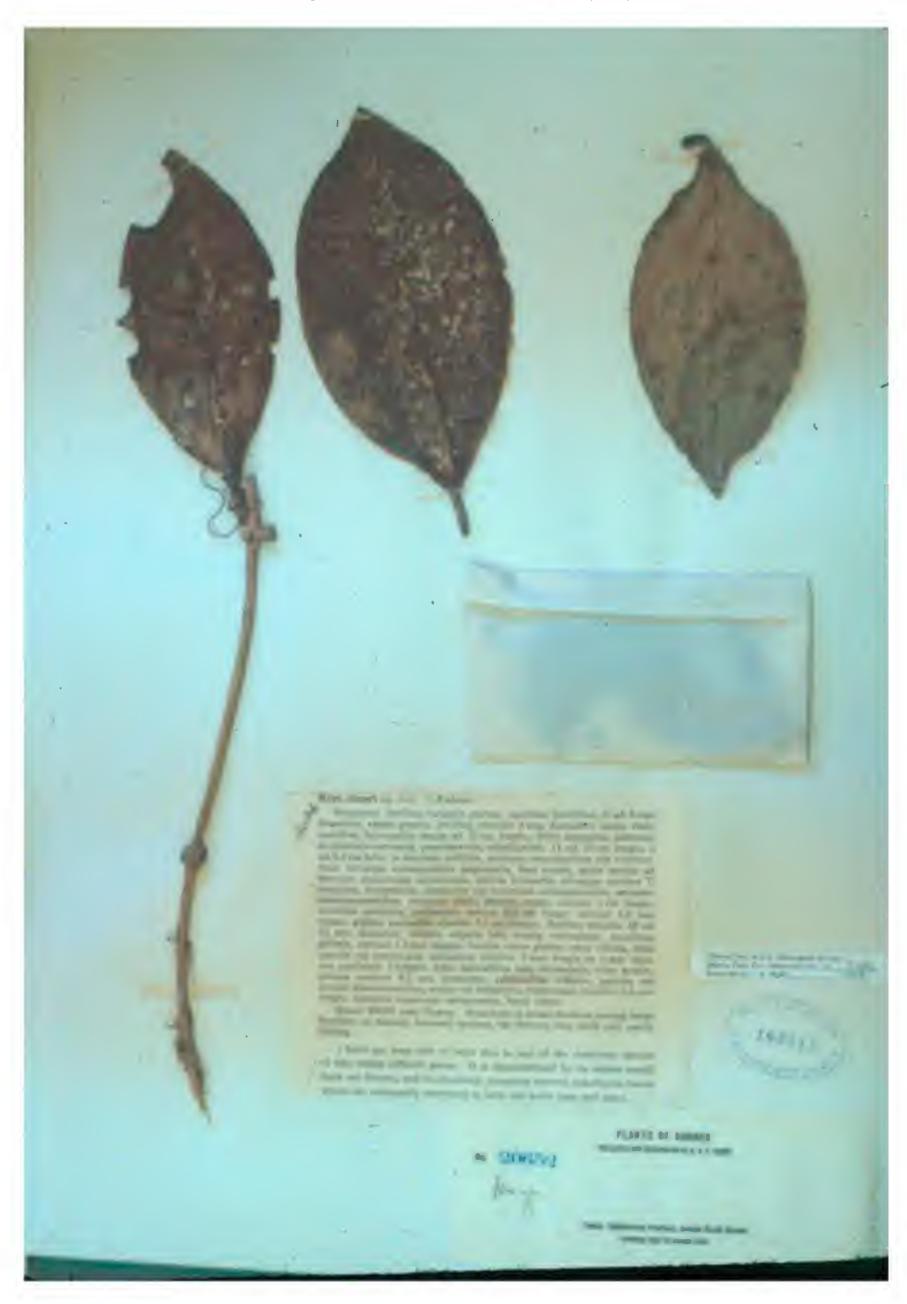


Hoya elmeri Merrill Isotype # 20652 (BISH)





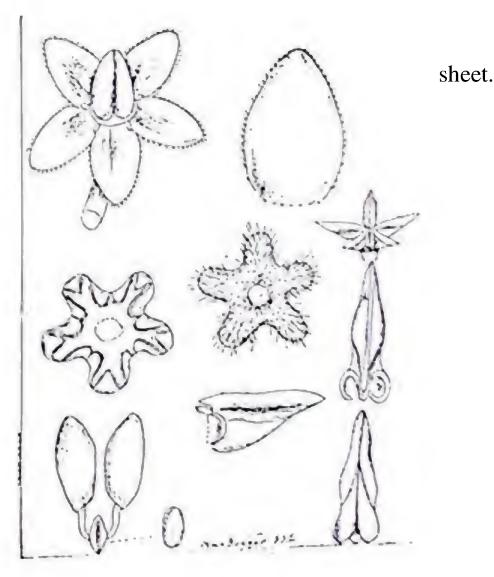
Hoya elmeri Merrill # 20652 (DS)



Reinstatement of **Hoya mindorensis subsp. mendozae** Kloppenburg & Ferreras from HOYA NEW Vol. 2-1 2014. Differences from *Hoya mindorensis* Schlechter in the type diagnosis were "It differs in not having ovate calyx lobes, having a larger corolla 1.10 cm contrastre 0.90 cm, with the anther wings not extended and the pollinaria shorter 0.50 mm contrastre 0.57 mm."

Michael Rodda et al in Webbia; Journal of Plant Taxonomy and Geography Vol. 69, No. 1, 45 stated **syn nov** to Hoya mindorensis Schlechter, Philipp. J. Sci, 1 (Suppl. 4) 303. 1906. Syn. = "taxonomic name rejected or being incorrectly applied or because the taxon has already been named"

This new subspecies Hoya mindorensis subsp. mendozae Kloppenburg & Ferreras in no way is synonymous with the species nor has it been rejected. In addition to the four major differences already enumerated in the original diagnosis I add the following: The leaves here are larger (longer and wider) 9.1-14.5 x 3.1 -5.8 versus "9-12 cm longis, supra medium 3.5 - 4.5 cm latis". Repeating "the sepals here are long triangular, with ciliate edges, granulate glabrous outside and glabrous slick inside, 0.14 cm long and 0.06 cm at the widest near the slight basal overlap, ligules are present" as opposed to "calycis segmentis ovatis, obtusis minute ciliatis, circ. 1.5 mm longis", See Dr. Schlechter's drawing on his type sheet below: Another major difference is the channeling of the ventral coronal lobes, here the channel does not have inner lobe portions of the channel turned outward forming a V shaped central channel as in the drawing below by Dr. Schlechter, this character found in other Philippine hoya species. One more major difference involves the pollinarium, here the pollinia have the inner apices round not tapered and the translators are shorter in proportion to the pollinia length. As far as I can determine all this group of species do have a sterile pellucid edges, although they are difficult to see.



Drawing from Dr. Schlechter's type